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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,002	02/16/2001	Leo Driessen	CS1089#SP	3636

7590 03/05/2004
The Black & Decker Corporation
701 East Joppa Road
Towson, MD 21286

EXAMINER

TRAN, LOUIS B

ART UNIT	PAPER NUMBER
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3721

DATE MAILED: 03/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/788,002

Applicant(s)

DRIESSEN, LEO

Examiner

Louis B Tran

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-16,18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-16,18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to applicant's amendment, Paper No. 14, received on 12/17/2003.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-4, 6-10, 11-16, 18, 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 requires a "tool-less means" by which the operator may couple the attachment. It is unclear what is encompassed by tool-less and what the scope of the claim is.

Claim 11 recites the limitation "the other one" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim. It is unclear what is being referred to.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4 and 7-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Van Laere (4,905,423).

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With respect to claim 1, Van Laere discloses the invention substantially as claimed including a power tool comprising a body having a motor, and a first output shaft 5 operatively coupled to the motor and an attachment for engagement with the body seen in Figure 38, wherein the attachment includes an input shaft 175 for operative engagement with the first output shaft 5 of the body when the attachment is engaged with the body, and wherein the attachment includes a further output shaft 222 for transmitting rotational motion derived from rotational motion of the attachment input shaft 175.

Furthermore, Van Laere shows a lock having a first portion 8 associated with the body and a second portion 233 that is associated with the attachment, wherein the first and second portions are engaged to one another to secure the body and attachment together. The lock also has an unlocked condition where the first and second portions are disengaged to permit removal of the attachment from the body. Van Laere shows wherein the lock provides an operator of the power tool with a tool-less means 236 by which the operator may couple the attachment to the body.

Van Laere also shows the power tool characterized by both the body and the attachment having a respective gear mechanism 13, 216, 220 for causing a change in rotation speed as between the input and the output of the respective gear mechanism, the combination of the body the attachment thereby providing a power tool with a plurality of serially coupled gear mechanisms as described in column 20, lines 35-50 and column 36, lines 55-68.

With respect to claim 2, Van Laere shows the gear mechanism 13 of the body is between the motor and the first output shaft 5.

With respect to claim 3, Van Laere shows the gear mechanism of the attachment is between the attachment input shaft and the further output shaft as seen in Figure 38.

With respect to claim 4, Van Laere shows the ratio of the input rotational speed to output rotational speed for each respective gear mechanism is fixed.

With respect to claim 7, Van Laere shows the attachment is releasably engageable with the body as in Figure 38, 39.

With respect to claim 8, Van Laere shows a tool including a plurality of attachments, each one of which may operatively engage with the body .

With respect to claim 9, Van Laere shows the gear mechanism of the body is operable to change a rotational ratio from the motor to the output shaft of the body .

With respect to claim 10, Van Laere shows the gear mechanism of the attachment is operative for changing a rotational ratio from the output shaft of the body to an output of the attachment.

With respect to claim 11, Van Laere discloses the invention substantially as claimed including a power tool comprising a body having a motor disposed therein, an attachment adapted to be selectively fixed to the body, a first gear arrangement 13 disposed within the body, the first gear arrangement operative for non-adjustably changing a rotational ratio from the motor to an output of the body and a second gear arrangement 216,220 disposed within the attachment.

Van Laere shows a lock 233,236 for coupling the body and attachment, including a first lock portion 8 that is permanently carried by one of the body and the attachment. The lock further includes a second lock portion 233 that is permanently associated with the attachment. The second lock portion is configured to engage the first lock portion in response to a manual input applied from a hand of an operator of the power tool, manual input being applied directly to the lock.

Van Laere shows the second gear arrangement engaging and driven by the first gear arrangement when the attachment is fixed to the body, the second gear arrangement operative for non-adjustably changing a rotational ratio from the output of the body to an output of the attachment as seen in Figure 38 and 1.

With respect to claim 12, Van Laere teaches wherein the body includes an output shaft 5 driven by the motor, the output shaft being controlled by the first gear arrangement 13.

With respect to claim 13, Van Laere teaches wherein the output shaft is operable to engage an input shaft disposed within the attachment.

With respect to claim 14, Van Laere teaches wherein the input shaft is controlled by the second gear arrangement.

With respect to claim 15, Van Laere teaches wherein the first gear arrangement and the second gear arrangement cooperate to mediate the rotational speed of the power tool.

With respect to claim 16, Van Laere teaches wherein the first gear arrangement is disposed between the motor and the attachment.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Curtiss (4,274,304) and further view of applicant's admitted prior art.

Van Laere discloses the invention substantially as claimed but does not explicitly show an epicyclic gearbox for each gearing mechanism.

However, Curtiss teaches the use of an epicyclic gear box with a motor and tool attachment arrangement as in column 2, lines 18-45 for the purpose of compact lightweight design as in column 2, lines 45-60.

Therefore, it would have been obvious to one having ordinary skill in the art to provide Van Laere with an epicyclic gear box in order for compact and lightweight design as is commonly practiced in the art.

Furthermore, this modification is further obviated by applicant's statement on page 57 lines 7-11, that those skilled in the art would recognize the use of an epicyclic gear reduction mechanism is standard practice, therefore, the epicyclic gear reduction mechanism is not described in detail in the specification.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Van Laere (4,905,423) in view of Kress et al. (4,103,511).

Van Laere discloses the invention substantially as claimed including the above but does not explicitly show wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other.

However, Kress et al. teaches a tool wherein the first output shaft and the attachment input shaft are splined for axial engagement with each other as seen in Figure 1 and 2 for the purpose of centering the corresponding attachment as described in column 4, lines 40-55.

Therefore, it would have been obvious to one having ordinary skill in the art to provide a splined connection to Van Laere in order to achieve improved centering.

Conclusion

9. Applicant's remarks have been fully considered but are deemed non-persuasive.

Applicant contends that the prior art does not show "tool tool-less" locking. To the extent that "tool tool-less" locking is definite, examiner contends that the locking device of Van Laere can be described as tool-less if a user were to tighten the bolt 236 by hand. Claim 11 requires a "manual input"; however, claims are given their broadest reasonable interpretation and a user with or without a tool can be described as a manual input.

For the above reasons, the grounds of rejection are deemed proper.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

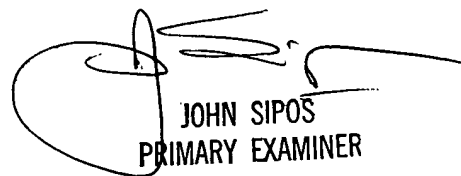
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis B Tran whose telephone number is 703-305-0611. The examiner can normally be reached on 8AM-6PM Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JOHN SIPOS
PRIMARY EXAMINER

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